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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/367,543	10/06/1999	ALEXANDR ALEXANDROVICH MIROSHIN	8472-018	4468

7590 03/12/2002

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1667 K STREET NW  
WASHINGTON, DC 20006

EXAMINER
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HON, SOW FUN

ART UNIT	PAPER NUMBER
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1772

15

DATE MAILED: 03/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/367,543

Applicant(s)

MIROSHIN ET AL.

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 97-163 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 97-163 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 97-102, drawn to a polarizer having a birefringent layer with at least one refraction index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

Group II, claim(s) 103-112, drawn to a polarizer having a means for dividing a plurality of non-polarized light beams and for changing polarization, and an optically isotropic layer next to a birefringent layer with at least one refraction index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

Group III, claim(s) 113-129, drawn to a polarizer in the form of at least one film or plate, having a birefringent anisotropically absorbing layer with at least one refractive index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

Group IV, claim(s) 136-138, drawn to a liquid crystal display element having a layer of liquid crystal between two plates, electrodes, and a polarizer having a means for dividing a plurality of non-polarized light beams and for changing polarization and direction, a birefringent anisotropically absorbing layer with at least one refraction index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

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Group V, claim(s) 139-148, drawn to a liquid crystal display element having a layer of liquid crystal between two plates, electrodes, and a polarizer having a means for dividing a plurality of non-polarized light in the form of focusing optical elements, each element having at least one birefringent anisotropically absorbing layer with at least one refraction index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

Group VI, claim(s) 149-159, drawn to a liquid crystal display element having a layer of liquid crystal between two plates, electrodes, and a polarizer in the form of a film or plate, having a means for dividing a plurality of non-polarized light beams, a polarizing means for dividing non-polarized light beams into polarized passing and reflected light beams having different polarizations, and a birefringent anisotropically absorbing layer with at least one refraction index that grows as the polarizable light wavelength increases at least at a certain range of the wavelength.

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Evidence of lack of unity between the groups is found in Gvon et al. (US Patent 5,739,296) and Okuzaki et al. (US 5,712,024) wherein they are found to disclose the features of instant claim 1. As such, the special technical features of the claimed invention are not found to define a contribution over the prior art.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

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The Markush-type species which are identical in both claims 135, 163 are as follows:

Species	Description
1	Organic salt of a dichroic anionic dye of general formula $\{\text{Chromogen}\}-(\text{XO}^-\text{M}^+)_n$
2	Asymmetric mixed salt of a dichroic anionic dye with different cations of general formula $(\text{M}_1^+\text{O}^-\text{X}-)_m[\text{M}^+\text{O}^-\text{X}'-(\text{CH}_2)_p\text{-Z-}]_g\{\text{Chromogen}\}[-\text{Z}-(\text{CH}_2)_p\text{-XO}^-\text{M}^+]_r(\text{XO}^-\text{M}^+)_n$
3	Associate of a dichroic dye with surface-active cation and/or amphoteric surfactant of general formula $(\text{M}_1^+\text{O}^-\text{X}-)_m[\text{M}^+\text{O}^-\text{X}'-(\text{CH}_2)_p\text{-Z-}]_g\{\text{Chromogen}\}[-\text{Z}-(\text{CH}_2)_p\text{-XO}^-\text{SUR}]_r(\text{XO}^-\text{SUR})_n$
4	Associate of a dichroic cationic dye with a surface-active anion and/or amphoteric surface-active dye of general formula $(\text{M}^+\text{O}^-\text{X}-)_m[\text{M}^+\text{O}^-\text{X}'-(\text{CH}_2)_p\text{-Z-}]_g\{\text{Chromogen}^+\}\text{SUR}$
5	Associate of a dichroic cationic dye with a surface-active cation and/or amphoteric surfactant of general formula: $\{\text{Chromogen}\}-[\text{Z}-(\text{CH}_2)_p\text{-X}+\text{RR}'\text{R}''\text{SUR}]_n$
6	Water-insoluble dichroic dye and/or a pigment with no ionogenic or hydrophilic groups
7	Low-molecular thermotropic liquid-crystal substance being a dichroic dye or containing a liquid-crystal and/or a dichroic dye other than liquid crystal dye and vitrified
8	Polymeric material other than liquid crystal one, with a controlled degree of hydrophilicity, dyed with a dichroic dye and/or an iodine compound

Species	Description
9	Polymer thermotropic liquid-crystal and/or non-liquid crystal substance comprising solved in mass and/or chemically bonded with a polymer chain dichroic dye
10	Dichroic dye capable of forming lyotropic liquid-crystal phase
11	Dichroic dye of polymer structure
12	Water-soluble organic dye capable of forming a stable lyotropic liquid-crystal phase of general formula {Chromogen}(SO <sub>3</sub> M) <sub>n</sub>
13	Mixes of any or all the above : Election of which would require further restriction

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the Markush group of species listed above in the following manner:

Claim 135: claims 97-102 (Group I); claims 103-112 (Group II); claims 113-129 (Group III).

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Claim 163: claims 136-138 (Group IV); claims 139-148 (Group V); claims 149-159 (Group VI).

The following claim(s) are generic:

Claims 130-134: Groups I-III.

Claims 160-162: Groups IV-VI.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Evidence of lack of unity between the species is found in Gvon et al. (US Patent 5,739,296) wherein it is found to disclose the features of instant species 1. As such, the special technical features of the claimed invention are not found to define a contribution over the prior art.

6. A telephone call was made to Nanda Alapati on March 1, 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

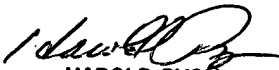
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Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

8H  
03/07/02

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/9/02